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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,743	12/06/2000	Steven B. Bridgers	P-5200-01-00	7935

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/729,743

Applicant(s)

BRIDGERS, STEVEN B.

Examiner

Michael P. Ferguson

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,30,31,36,37,45,50,54,55,60,62,63,67,72,73,76,78,79,81,82 and 105-117 is/are allowed.
- 6) ☒ Claim(s) 22-24,27-29,32,33,41-43,46,47,51-53,56,57,61,69,77 and 89-104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/30/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Continuation of Disposition of Claims: Claims pending in the application are 22-24,26-33,36,37,41-43,45-47,50-57,60-63,67-69,72,73,76-79,81,82 and 89-117.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 30, 2004 has been entered.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 22-24, 29, 33, 41-43, 51-53, 61, 69, 77, 89-91, 94-96, 99 and 102 is withdrawn in view of the newly discovered reference(s) to Ubhayakar et al. (US 4,964,062). Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

3. Claims 36 and 69 are objected to because of the following informalities:

Claim 36 (line 1) recites "A connector module as recited in claim 35, comprising". It should recite --A connector module comprising--.

Claim 69 fails to include the limitations of claim 64. Claim 69 (line 12) recites "said connector modules. ". It should recite --said connector modules; said structure having an adjustable shape defined by connections between said second end of said strut and said another structural element and a position of said resilient member of at least one of said plurality of said connector modules. --.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 22-24, 29, 33, 41-43, 51-53, 61, 69, 77, 89-91, 94-96, 99 and 102 are rejected under 35 U.S.C. 102(b) as being anticipated by Ubhayakar et al. (US 4,964,062).

As to claim 22, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element, the body comprising a counter bore, the resilient member being inserted into the counter bore (Figures 14-15b and 16).

As to claim 23, Ubhayakar et al. disclose a connector module wherein a resilient member **61** comprises a spring (Figure 17a-17c).

As to claim 24, Ubhayakar et al. disclose a connector module wherein a spring **61** provides relative movement between the connector module and a second connector module (Figure 16).

As to claim 29, Ubhayakar et al. disclose a connector module comprising:

a body **64**, a portion of the body having a solid exterior surface;

a resilient member **61** having a first end connected to a location on the solid exterior surface and a second end, the resilient member accommodating rotational and translation motion in more than one plane from the location;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;  
and

an actuator to adjust a position of the resilient member (Figures 14-15b and 16).

As to claim 33, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;  
and

an actuator to adjust a position of said resilient member (Figures 14-15b and 16).

As to claim 41, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end, the resilient member further accommodating axial motion;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element; the body comprising a counter bore, the resilient member being inserted into the counter bore.

As to claim 42, Ubhayakar et al. disclose a connector module wherein a resilient member **61** comprises a spring (Figures 17a-17c).

As to claim 43 Ubhayakar et al. disclose a connector module wherein a spring **61** provides relative movement between the connector module and a second connector module (Figure 16).

As to claim 51, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;

the resilient member further accommodating axial motion and providing a degree of motion permitting the strut to move between a position in a first plane and a position in a second plane and

an actuator to adjust a position of the resilient member (Figures 14-15b and 16).

As to claim 52, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;

the resilient member further accommodating axial motion ; and

an actuator to adjust a position of said resilient member (Figures 14-15b and 16).

As to claim 53, Ubhayakar et al. disclose a connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;

the another structural element comprising a second connector module;

the resilient member further accommodating axial motion; and



an actuator to adjust a position of the resilient member (Figures 14-15b and 16).

As to claim 61, Ubhayakar et al. disclose a structure comprising a plurality of connector modules, each connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;  
and

an actuator to adjust a position of the resilient member (Figures 14-15b and 16).

As to claim 69, Ubhayakar et al. disclose a structure comprising a plurality of connector modules, each connector module comprising:

a body **64**, a portion of the body having a solid exterior surface;

a resilient member **61** having a first end connected to a location on the solid exterior surface and a second end, the resilient member accommodating translational and rotational motion in more than one plane from the location;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element;  
and

an actuator to adjust a position of the resilient member of one of the connector modules;

the structure having an adjustable shape defined by connections between the second end of the strut and the another structural element and a position of the resilient member of one of the plurality of the connector modules. (Figures 14-15b and 16).

As to claim 77, Ubhayakar et al. disclose a structure wherein a resilient member **61** accommodates axial motion (Figure 16).

As to claim 89, Ubhayakar et al. disclose a connector module comprising:  
a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element,

the body comprising a counter bore, the resilient member being inserted into the counter bore;

the another structural element comprising a second connector module (Figures 14-15b and 16).

As to claim 90, Ubhayakar et al. disclose a connector module wherein another structural element comprises a second strut (Figure 16).

As to claim 91, Ubhayakar et al. disclose a connector module wherein a resilient member **61** provides a degree of motion permitting a strut **63,65,67,69** to move between a position in a first plane and a position in a second plane.

As to claim 94, Ubhayakar et al. disclose a connector module wherein resilient member **61** further accommodates axial motion (Figure 16).

As to claim 95, Ubhayakar et al. disclose a connector module wherein another structural element comprises a second connector module (Figures 16).

As to claim 96, Ubhayakar et al. disclose a connector module wherein another structural element comprises a second strut (Figure 16).

As to claim 99, Ubhayakar et al. disclose a connector module wherein a resilient member **61** provides a degree of motion permitting a strut **63,65,67,69** to move between a position in a first plane and a position in a second plane (Figures 16).

As to claim 102, Ubhayakar et al. disclose discloses a structure comprising a plurality of connector modules, each connector module comprising:

a body **64**;

a resilient member **61** accommodating translational and rotational motion in more than one plane, the resilient member having a first end connected to the body and a second end;

a strut **63,65,67,69**, the strut having a first end connected to the second end of the resilient member and a second end for connection to another structural element,

the body comprising a counter bore, the resilient member being inserted into the counter bore (Figures 14-15b and 16).

***Allowable Subject Matter***

6. Claims 26, 30, 31, 36, 37, 45, 50, 54 55, 60, 62, 63, 67, 68, 72, 73, 76, 78, 79, 81, 82 and 105-117 are allowed.

7. Claims 27, 28, 32, 46, 47, 56, 57, 92, 93, 97, 98, 100, 101, 103 and 104 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

As to claims 27, 46, 92, 97, 100 and 103, Ubhayakar et al. fail to disclose a connector module wherein a strut comprises a telescoping member.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify a connector module as disclosed by Ubhayakar et al. to have a strut comprising a telescoping member as the prior art neither teaches nor suggests such modifications absent the applicant's own disclosure.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to connector modules:

Baer (US 3,343,864) and Rennex (US 5,129,279) are cited for pertaining to connector modules having a resilient member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703)308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*MPF*

MPF  
05/26/04

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